water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance as set forth in paragraph (g) of this section as well as the effluent limitations found at 40 CFR part 434.

- (2) The plan shall identify the surface-water quantity and quality parameters to be monitored, sampling frequency and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance.
- (i) At all monitoring locations in streams, lakes, and impoundments, that are potentially impacted or into which water will be discharged and at upstream monitoring locations, the total dissolved solids or specific conductance corrected at 25 °C, total suspended solids, pH, total iron, total manganese, and flow shall be monitored.
- (ii) For point-source discharges, monitoring shall be conducted in accordance with 40 CFR parts 122, 123 and 434 and as required by the National Pollutant Discharge Elimination System permitting authority.
- (3) The monitoring reports shall be submitted to the regulatory authority every 3 months. The regulatory authority may require additional monitoring.

[48 FR 43987, Sept. 26, 1983, as amended at 52 FR 45923, Dec. 2, 1987; 53 FR 36401, Sept. 19, 1988; 60 FR 16748, Mar. 31, 1995]

## § 784.15 Reclamation plan: Land use information.

- (a) The plan shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area, including:
- (1) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within 5 years before the anticipated date of beginning the proposed operations, the historic use of the land shall also be described. In the case of previously mined land, the use of the land prior to any mining shall also be described to the extent such information is available.
- (2) A narrative of land capability and productivity, which analyzes the landuse description under paragraph (a) of this section in conjunction with other

environmental resources information. The narrative shall provide analyses of:

- (i) The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover, and the hydrology of the proposed permit area; and
- (ii) The productivity of the proposed permit area before mining, expressed as average yield of food, fiber, forage, or wood products from such lands obtained under high levels of management. The productivity shall be determined by yield data or estimates for similar sites based on current data from the U.S. Department of Agriculture, State agricultural universities, or appropriate State natural resource or agricultural agencies.
- (b) Each plan shall contain a detailed description of the proposed use, following reclamation, of the land within the proposed permit area including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans. This description shall explain:
- (1) How the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use; and
- (2) Where a land use different from the premining land use is proposed, all materials needed for approval of the alternative use under 30 CFR 817.133.
- (3) The consideration which has been given to making all of the proposed surface mining activities consistent with surface owner plans and applicable State and local land use plans and programs.
- (c) The description shall be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and the State and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

[59 FR 27937, May 27, 1994]

## § 784.16

## §784.16 Reclamation plan: Siltation structures, impoundments, banks, dams, and embankments.

- (a) General. Each application shall include a general plan and a detailed design plan for each proposed siltation structure, water impoundment, and coal processing waste bank, dam, or embankment within the proposed permit area.
  - (1) Each general plan shall—
- (i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional, land surveyor with assistance from experts in related fields such as landscape architecture;
- (ii) Contain a description, map, and cross section of the structure and its location:
- (iii) Contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure:
- (iv) Contain a survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred; and
- (v) Contain a certification statement which includes a schedule setting forth the dates when any detailed design plans for structures that are not submitted with the general plan will be submitted to the regulatory authority. The regulatory authority shall have approved, in writing, the detailed design plan for a structure before construction of the structure begins.
- (2) Impoundments meeting the Class B or C criteria for dams in the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60 (210-VI-TR60, Oct. 1985), "Earth Dams and Reservoirs," Technical Release No. 60 (TR-60) shall comply with the requirements of this section for structures that meet or exceed the size or other criteria of the Mine Safety and Health Administration (MSHA). The technical release is hereby incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR

- part 51. Copies may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, order No. PB 87-157509/AS. Copies can be inspected at the OSM Headquarters Office, Office of Surface Mining Reclamation and Enforcement, Administrative Record, Room 660, 800 North Capitol Street, Washington, DC or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. Each detailed design plan for a structure that meets or exceeds the size or other criteria of MSHA, §77.216(a) of this chapter shall:
- (i) Be prepared by, or under the direction of, and certified by a qualified registered professional engineer with assistance from experts in related fields such as geology, land surveying, and landscape architecture;
- (ii) Include any geotechnical investigation, design, and construction requirements for the structure;
- (iii) Describe the operation and maintenance requirements for each structure; and
- (iv) Describe the timetable and plans to remove each structure, if appropriate.
- (3) Each detailed design plan for structures not included in paragraph (a)(2) of this section shall:
- (i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional, land surveyor, except that all coal processing waste dams and embankments covered by §§817.81 through \$17.84 of this chapter shall be certified by a qualified, registered, professional engineer:
- (ii) Include any design and construction requirements for the structure, including any required geotechnical information;
- (iii) Describe the operation and maintenance requirements for each structure; and
- (iv) Describe the timetable and plans to remove each structure, if appropriate.